

# U. S. ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE FEDERAL BUILDING, 10 West 15<sup>th</sup> Street, Suite 3200 HELENA, MONTANA 59626

Ref: 8MO

October 14, 2008

Mr. Greg Wood City of Missoula Public Works 435 Ryman Street Missoula, Montana T 59802

Re: CEQ 20080327: STPU-M 8105 (8), CN 4128,

Russell Street/South 3rd Street Project Draft EIS

Dear Mr. Wood:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Russell Street/South 3<sup>rd</sup> Street Project. The EPA reviews EISs in accordance with its responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. The EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

We support the City of Missoula's, Montana Dept. of Transportation's (MDT)and Federal Highway Administration's (FHWA) efforts to improve safety and mobility in the Russell Street and South 3<sup>rd</sup> Street corridors, particularly proposed efforts to increase opportunities for pedestrian and bicycle travel. We understand, however, that there are public concerns about the potential effects of the proposed 4/5 lane Russell Street configuration on local community and neighborhood character and bicycle and pedestrian passage. We encourage the City of Missoula, MDT and FHWA to fully consider such public concerns as additional evaluation of Russell Street lane configurations are carried out. We also suggest that you consider segregation of bicycle lanes from traffic lanes on the proposed Russell Street modifications, since that may provide a degree of safety that may better promote use of bicycle lanes on a busy 4/5 lane roadway. The EPA is a Smart Growth Network partner, and we also encourage the lead agencies to fully evaluate and consider smart growth options as it conducts additional deliberations on transportation improvements for this project (see <a href="http://www.epa.gov/smartgrowth/sg\_network.htm">http://www.epa.gov/smartgrowth/sg\_network.htm</a>).

We also want to indicate that the Missoula area is still designated an air quality non-attainment area for particulates less than 10 microns (PM-10), and we did not see analysis for PM-10 in the DEIS. A hot spot analysis is required under the criteria found at 40 CFR 93.123(b)(1). While exhaust emissions of PM-10 may decrease with the preferred alternative, it



is likely that road dust emissions may increase as a result of increased volume of traffic and speeds, and construction activities. The FEIS should include PM-10 analysis, including discussion of potential increased traffic volume and speeds, effects on PM-10 levels, and potential for an increase in PM-10 National Ambient Air Quality Standards exceedances due to proposed activities. We also recommend additional discussion and information regarding proposed measures to control particulate emissions during construction.

In addition, we have some environmental concerns regarding potential adverse effects to water quality and aquatic habitat associated with demolition of the old Russell Street bridge over the Clark Fork River and construction of a new bridge. We encourage use of bridge designs that will collect runoff from the bridge surfaces and roadway and direct runoff to treatment systems rather than directly discharge road runoff to surface waters. We understand that the agencies anticipate treatment of bridge runoff, but we believe a commitment for effective runoff treatment should be identified in the FEIS and ROD, and that additional information on bridge/road runoff treatment systems should be provided to assure effective treatment, and thus, protection of both the Clark Fork River and the Missoula Valley Sole Source Aquifer water quality.

We understand that the agencies intend to address bridge removal and construction with Special Provisions during final design, but similar to our comment above regarding treatment of bridge runoff, we believe the FEIS and ROD should include a commitment for effective management controls during bridge construction to avoid entry of concrete dust, construction debris, and lead based paint dust or flakes into the Clark Fork River during demolition of the old bridge and reconstruction of the new bridge.

Also, it appears to us that the existing bridge, which was built many years ago, may impede some flood flows since there is deposition of sediments immediately upstream of the bridge, and such deposition is often an indicator that movement of sediment down the river may be impeded. We recommend that an alluvial geomorphologist and hydrologist be included on the bridge design team in order to evaluate such considerations and incorporate appropriate bridge design modifications that may offer opportunities to correct any deficiencies in the hydraulic opening that may exist with the present bridge (e.g., longer bridge spans, reduce number of bridge piers/supports in the river channel, modify width and/or orientation of bridge piers/supports, etc.). It is important that the proposed new Russell Street bridge provide an adequate span of the Clark Fork River channel, floodway and riparian area to pass flood flows, flood borne debris, sediment, and bedload, with minimal river channel, floodplain and riparian encroachment, and minimal creation of scour or erosive eddies, sedimentation, gravel deposition, and backwater (e.g., wide bridge spans, and/or construction of bridges on pilings, as opposed to fill reduce encroachment). We support a bridge design that will reduce flow impedances and encroachment on and within the river channel as much as possible.

Our more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Russell Street/South 3<sup>rd</sup> Street Project DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Russell Street/South 3<sup>rd</sup> Street Project DEIS has

been rated as Category EC-2 (Environmental Concerns - Insufficient Information). Our concerns revolve around potential adverse water and air quality effects that may occur during construction. A summary of EPA's DEIS rating criteria is attached.

We thank you for the opportunity to review and comment on this DEIS. If you have questions regarding our comments please feel free to call Mr. Steve Potts of my staff in Missoula at 406-329-3313 or in Helena at 406-457-5022, or via e-mail at <a href="mailto:potts.stephen@epa.gov">potts.stephen@epa.gov</a>.

Sincerely,

/s/

John F. Wardell Director EPA Montana Office

## Enclosures

cc: Larry Svoboda/Connie Collins, EPA, 8EPA-N, Denver Robert Ray/Jeff Ryan, MDEQ, Helena

# **EPA Comments on Russell Street and South 3rd Street Project Draft EIS**

# **Brief Project Overview:**

The draft EIS for the Russell Street and South 3rd Street Reconstruction Project is being prepared by the Montana Dept. of Transportation in cooperation with the City of Missoula and Federal Highway Administration to improve traffic flow and roadway safety and maintenance on Russell Street and South 3<sup>rd</sup> Street. These roadways are main arterials in the City of Missoula, Montana, which are currently experiencing traffic congestion, and safety concerns, and have inadequate bicycle and pedestrian crossings, and the Russell Street bridge over the Clark Fork River is considered to be too narrow. The proposed project includes reconstruction of approximately 1.5 miles of Russell Street from the intersection of Mount Avenue/South 14<sup>th</sup> north to West Broadway Street, including construction of a new Clark Fork River bridge, and reconstruction of approximately 1 mile of South 3<sup>rd</sup> Street from Reserve Street east to Russell Street.

Alternatives evaluated include the no-build alternatives, Alternatives 1 (Russell Street) and Alternative A (South 3<sup>rd</sup> Street), and five build alternatives for Russell Street (Alternatives 2 -5 and Alternative 5 refined), and four build alternatives for South 3<sup>rd</sup> Street (Alternatives B-E). All Russell Street alternatives would include bicycle lanes and sidewalks, and remove the existing two-lane bridge over the Clark Fork River and construct a new four-lane bridge, and provide grade separated crossings at the Russell Street connection with the Bitterroot Branch Trail, Milwaukee Corridor Trail, and Shady Grove (River) Trail.

Russell Street Alternative 2 would involve reconstructing Russell Street with two lanes (one northbound and one southbound) from Mount Avenue/South 14<sup>th</sup> to South 8<sup>th</sup>; two lanes with center median from South 8<sup>th</sup> to South 1st Street; two travel lanes and a center turn lane from S. 1<sup>st</sup> St. to Wyoming St; and four travel lanes from Wyoming Street to West Broadway. Two lane roundabouts would be placed at four intersections (i.e., intersections with Mount/South 14<sup>th</sup>, South 5<sup>th</sup>, South 3<sup>rd</sup>, and Wyoming Street. A single lane roundabout would be placed at the intersection with South 11<sup>th</sup> St/Knowles St., and a traffic light would remain at Broadway and Russell Street intersection.

Russell Street Alternative 3 is the same lane configurations and intersection control as Alternative 2, but includes twice the raised median to enhance traffic flow as compared to Alternative 2, and a median between Mount Ave and South 8<sup>th</sup> Street.

Russell Street Alternative 4 would involve four travel lanes from Mount Avenue/South 14<sup>th</sup> to West Broadway plus a center turn lane or raised median throughout the corridor. Major intersections would be controlled by traffic signals. This is the preliminary preferred alternative for Russell Street.

Russell Street Alternative 5 would involve the same four lane configuration as Alternative 4, but would use two lane roundabouts at the major intersections except with a traffic signal at the West Broadway intersection.

Russell Street Alternative 5 refined includes modifications to Alternative 5 to reduce right-of-way requirements/impacts to adjacent properties (e.g., leave the existing traffic signal at the Russell St.- Mount Ave. intersection; reduce size of roundabouts at S. 3<sup>rd</sup> St. and S. 5<sup>th</sup> St.; include traffic signal at Russell St-Wyoming St. intersection instead of roundabout; eliminate roundabout at S. Knowles St).

South 3<sup>rd</sup> Street Alternative B would involve two lanes (one eastbound and one westbound) with roundabouts at three intersections (i.e., intersections with Curtis, Johnson, and Catlin Streets) and a traffic signal at the intersection with Reserve Street. There would be no raised medians within the corridor except at select locations where they would increase the functionality of intersections.

South 3<sup>rd</sup> Street Alternative C is similar to Alternative B, however, raised medians and center turn lanes would be used more liberally than for Alternative B throughout the corridor to enhance traffic flow. This is the preliminary preferred alternative for S. 3<sup>rd</sup> Street.

South 3<sup>rd</sup> Street Alternative D would include one eastbound lane and two westbound lanes with traffic signals at Reserve Curtis, Johnson, and Catlin Streets.

South 3<sup>rd</sup> Street Alternative E includes two travel lanes use of raised medians, and center turn lanes and traffic signals at the four major intersections.

#### Comments:

- 1. We appreciate the inclusion of many figures and aerial photos, including the large foldout figures and photos, in the DEIS that clearly display the project alternatives and features for the affected roadways. These figures and photos greatly aid in improving public understanding of project features and proposed alternatives.
- 2. We very much support proposed addition of sidewalks and bicycle lanes to Russell Street and S. 3<sup>rd</sup> Street, including adding pedestrian and bicycle travel opportunities to the proposed new Russell Street bridge (pages 2-4 to 2-6). We also support the provision of underpasses at the intersections of the Bitterroot Branch trail, Milwaukee Corridor trail, and Shady Grove (River) trail with Russell Street to improve connectivity of existing pedestrian and bicycle paths.

We understand that there are public concerns regarding the potential effects of the proposed 4/5 lane configuration on Russell Street in regard to local community and neighborhood character. We encourage you to fully consider such public concerns as additional evaluation of the Russell Street lane configurations are carried out. We also suggest that you consider segregation of bicycle lanes from traffic lanes on Russell Street, since that may provide a degree of safety on the busy 4/5 lane roadway that may better promote use of bicycle lanes. The EPA is a Smart Growth Network partner, and we also encourage the lead agencies to evaluate and consider smart growth options as it

conducts additional deliberations regarding transportation improvements for the Russell Street, South 3<sup>rd</sup> Street and other areas of the City of Missoula (see <a href="http://www.epa.gov/smartgrowth/">http://www.epa.gov/smartgrowth/</a> and <a href="http://www.epa.gov/smartgrowth/sg\_network.htm">http://www.epa.gov/smartgrowth/sg\_network.htm</a> ).

- 3. Five build alternatives for Russell Street are mentioned in the beginning of the Executive Summary (page ES-3), however, only four Russell Street build alternatives are included in the alternatives discussions and comparison tables in Chapter 2, until the refinement of Alternative 5 is mentioned on page 2-40. This created some confusion in trying to follow and understand the fifth Russell Street build alternative. It is our understanding that Alternative 5 refined involves a modified roundabout design and alignment to reduce to impacts to historic properties (page ES-5). We suggest that confusion regarding the number of Russell Street alternatives evaluated could be avoided by either stating that there were four Russell Street build alternatives, including some refinements for Alternative 5, or by describing Alternative 5 refined as a separate alternative equivalent to the other Russell Street build alternatives. It is our understanding that the refinements to Alternative 5 would still adversely impact historic properties, and thus, this alternative is not identified as the preferred alternative.
- 4. An important environmental concern with the proposed project are potential impacts associated with removal of the existing Russell Street bridge, and construction of a new bridge across the Clark Fork River. The DEIS includes discussion of structural deficiencies of the existing bridge on page 1-15, and provides some information on the proposed new bridge on page 4-30. We believe that it is important that the proposed new bridge provide an adequate span of the Clark Fork River channel, floodway and riparian area to pass flood flows, flood borne debris, sediment, and bedload, with minimal river channel, floodplain and riparian encroachment, and minimal creation of scour or erosive eddies, sedimentation, gravel deposition, and backwater (e.g., wide bridge spans, and/or construction of bridges on pilings, as opposed to fill reduce encroachment).

It appears to us that the existing bridge, which was built many years ago, may impede some flood flows since there appears to be deposition of sediments immediately upstream of the bridge, and such deposition is often an indicator that movement of sediment down the river may be impeded. We recommend that an alluvial geomorphologist and hydrologist be included on the bridge design team in order to evaluate such considerations and incorporate appropriate bridge design modifications that may offer opportunities correcting any deficiencies in the hydraulic opening that may exist with the present bridge (e.g., longer bridge spans, reduce number of bridge piers/supports in the river channel, modify width and/or orientation of bridge piers/supports, etc.). We support a bridge design that will reduce flow impedances and encroachment on and within the river channel as much as possible.

5. We also encourage use of bridge designs that will collect runoff from the bridge surfaces and roadway and direct such runoff to treatment systems rather than directly

discharge road runoff to surface waters to reduce potential for contamination of the river. We understand that the agencies anticipate treatment of bridge runoff, but we believe such a commitment for effective runoff treatment should be identified in the FEIS and ROD. We recommend that the FEIS and ROD clearly state that runoff from the bridges surfaces and roadway will be collected and directed to treatment systems such as dry well or infiltration beds to avoid direct discharge of contaminated bridge runoff to the Clark Fork River.

6. Also in regard to bridge removal and reconstruction, we recommend that management practices be developed to control entry of concrete dust, construction debris, and lead based paint dust or flakes into the Clark Fork River during bridge demolition and construction. Bridge demolition and construction techniques that capture dust, bridge debris and sandblasting or scraping residue should be identified and discussed. We suggest that you contact Mr. Bob Reinke of the Montana Dept. of Environmental Quality in Helena at 406-444-1435 and Mr. Jeff Ryan at 406-444-4626, regarding requirements for bridge work and necessary mitigation measures to protect water quality.

We understand that the agencies intend to address bridge removal and construction with Special Provisions during final design, but similar to our comment above regarding treatment of bridge runoff, we believe the FEIS and ROD should include a commitment for effective management controls during bridge construction to avoid entry of concrete dust, construction debris, and lead based paint dust or flakes into the Clark Fork River during demolition of the old bridge and reconstruction of the new bridge.

- 7. The U.S. Army Corps of Engineers (Todd Tillinger in Helena at 406-441-1375) should also be contacted in regard to 404 permit requirements for placement of fill material in the river. There may also be a need to consider timing limitations for bridge demolition and construction work depending upon potential impacts to Clark Fork River water quality and fisheries. The U.S. Fish & Wildlife Service and Montana Dept. of Fish, Wildlife & Parks should also be consulted in regard to bridge demolition and construction work that may impact aquatic life in the river.
- 8. It is stated that no wetlands were identified within the Russell Street and South 3<sup>rd</sup> Street corridors, and the proposed project will not result in wetland impacts (page 4-29). We understand that the riparian area adjacent to the Clark Fork River was assessed for the presence of wetlands and no wetlands were identified. For improved public understanding it may be helpful to state that, "no wetlands were identified within the Russell Street and South 3<sup>rd</sup> Street corridors, including the riparian area adjacent to the Clark Fork River where bridge replacement activities are proposed." This would help clarify that project consultants did not identify jurisdictional wetlands adjacent to the river.
- 9. As you know, the Missoula Valley Aquifer is the primary groundwater resource of the Missoula Valley, supplying 80 percent of the drinking water of Missoula County

residents, and is designated a sole source aquifer under Section 1424(e) of the Safe Drinking Water Act. The DEIS indicates that "if" the City of Missoula establishes a dry well system in the vicinity of the project corridor, runoff from impervious surfaces could be collected in dry wells and filtered through the alluvium before reaching the aquifer (page 4-28). On page 4-29 it is stated that "should" the Best Management Practices selected to manage stormwater runoff for the preferred alternative include the use of a dry well system additional EPA and Missoula Valley Water Quality District requirements may be necessary to protect the Missoula Valley Aquifer.

This language does not appear to provide a definitive commitment that dry wells will be used, nor is there much information about the potential dry well treatment system, or depth to groundwater in areas where drywells may be proposed. We have been advised that detailed dry well design will occur during the final design, and there is a commitment to protect the Missoula Valley Aquifer. We believe that a clear commitment that dry wells or an equivalent treatment system would in fact be used to capture and treat roadway runoff to protect aquifer quality should be included in the FEIS. We recommend that this commitment be stated in the FEIS, and that the language regarding "if" or "should" a dry well system be used, be modified to indicate that a dry well or equivalent system for treatment of contaminated runoff discharges to groundwater "will" be used. This will provide greater assurances that an appropriate treatment system will be used to protect groundwater.

We also recommend that additional information on dry well or equivalent treatment system design be provided in the FEIS to provide assurances that groundwater quality will be adequately protected. Dry wells can be an effective way to remove contaminants from storm water runoff when there is a deep enough soil profile to provide for filtering and adsorption of contaminants, but we would like to see a more definitive information in the FEIS about the dry wells, including soil characteristics and depth to groundwater. Also, it is important that a regular dry well inspection and maintenance schedule be implemented, and that groundwater monitoring be performed to assure that dry wells provide effective treatment of storm water runoff from the roadway. Information on dry well inspection, maintenance on groundwater monitoring should also be provided in the FEIS. If you have any questions regarding the requested groundwater protection information and compliance with the Sole Source Aquifer Program please contact Ms. Darcy Campbell of EPA's Region 8 Groundwater Protection Program Office in Denver at 303-312-6709.

10. The Missoula area is still currently designated a non-attainment area for PM-10 (page 3-15), however, we did not see analysis for PM-10 in the DEIS. A hot spot analysis is required under the criteria found at 40 CFR 93.123(b)(1). In addition there should be an analysis for the PM-10 emission trends for the action and no action alternative. This will give the DEIS reader an indication of the expected impacts regardless of whether or not it will cause a National Ambient Air Quality Standards (NAAQS) violation. While exhaust emissions of PM-10 may decrease it is likely that road dust emissions may increase because of the increased volume of traffic and speeds, and construction

activities. We recommend that the FEIS include additional discussion of potential increased traffic volume and speeds, effects on PM-10 levels, and potential for an increase in PM-10 NAAQS exceedances due to proposed activities. If you have any questions please contact Mr. Jeffrey Kimes in our Denver Regional Office at 303-312-6445.

- 11. Air quality impacts during construction while temporary can be of long duration in projects lasting several years. Particulates and diesel emissions in high concentrations can be present during construction and should be evaluated. The duration and project phasing of construction activities and resultant emissions should be discussed in the FEIS. The DEIS indicates that construction contractors will comply with applicable dust control requirements, but those dust control requirements are not identified. We believe the FEIS should identify the specific actions to be taken to minimize dust, and equipment emissions from construction vehicles and roadway vehicles and other activities that will disturb the soil. This will enable the public to better understand efforts to reduce dust emissions during construction. We also recommend that the FEIS describe methods that will be used to minimize tracking of soil and mud from unpaved areas during construction to avoid particulate matter pollution from the re-entrainment of dried mud and soil by vehicles passing through and near the project area.
- 12. We are pleased that the DEIS states that Mobile Source Air Toxics (MSATs) emissions are likely to be lower in the future (page 3-17), although the DEIS also states that roadway widening proposed as part of the preferred alternative would have the effect of moving some traffic closer to nearby homes, schools, and businesses, so that there may be localized areas where ambient concentrations of MSATs could be higher than the No Build Alternative. This discussion also indicates that there are technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects of MSATs. EPA agrees that there are uncertainties associated with calculating future health impacts of MSATs, since ambient background levels are generally not known for specific air contaminants and assumptions would have to be made on the residence time of an individual in neighborhoods near roadways. However, estimates on human health environmental impacts are often done, and we often recommend quantitative analyses of human health impacts. However, we acknowledge that the qualitative analysis of MSAT emissions for the Russell Street and South 3<sup>rd</sup> Street project is adequate due to the relatively low level of anticipated MSAT emissions.
- 13. On page 4-37 it is stated that the location of historic sites is shown on Figure 4-7, however, it appears that Figure 4-9 (page 4-40) shows the location of historic sites. We suggest that this labeling error be corrected. We support protection of historic and 4(f) sites as much as possible.

# U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

# **Definitions and Follow-Up Action\***

# **Environmental Impact of the Action**

- **LO Lack of Objections:** The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.
- **EC Environmental Concerns:** The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.
- **EO - Environmental Objections:** The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.
- **EU Environmentally Unsatisfactory:** The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

#### **Adequacy of the Impact Statement**

- **Category 1 - Adequate:** EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- **Category 2 - Insufficient Information:** The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.
- Category 3 -- Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.
- \* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.